

DEPARTMENT OF THE ARMY SUPPLY BULLETIN

Army Medical Department Supply Information

Headquarters, Department of the Army, Washington, DC 20310-2300 20 February 2003

Effective until rescinded or superseded

DISTRIBUTION STATEMENT A: Approval for public release; distribution is unlimited

Printing of this information does not constitute endorsement of the product, manufacturer, or the use of any related item thereof by the U. S. Army.

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can improve this publication. If you find any mistakes, or you know a way to improve it, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the U. S. Army Medical Materiel Agency, ATTN: MCMR-MMA-O, Fort Detrick, MD 21702-5001.

<u>Table of Contents</u>	<u>Page</u>
CHAPTER 1 - Medical Maintenance General Information	1-1
CHAPTER 2 - Medical Maintenance Operations Information	2-1
Literature CDs Availability:	
APPENDIX A - Operations & Maintenance, Disc 1	A-1
APPENDIX B - Operations & Maintenance, Disc 2	B-1
APPENDIX C - Operations & Maintenance, Disc 3	C-1
APPENDIX D - Operations & Maintenance, Disc 4	D-1
APPENDIX E - Assembly of Sink Unit Frame	E-1
INDEX -	I-1

NOTICE

This Supply Bulletin is devoted entirely to
Medical Maintenance Information

CHAPTER 1. MEDICAL MAINTENANCE GENERAL INFORMATION

1-1. BIOMEDICAL EQUIPMENT TECHNICIAN (BMET) TRAINING WEBSITE

A website for BMET training information about the school, course narratives, course structure, and prerequisites for Army students is available. The website is rich with information and helpful links. The address for the website is <http://www.cs.amedd.army.mil/bmet>.

1-2. EQUIPMENT LITERATURE AVAILABILITY

Literature for medical equipment is available on CDs. Located at appendices A, B, C, and D are the Table of Contents for four CDs that are now available. The underscoring indicates a link to the product you have selected on the CD. To obtain a copy of this literature, call DSN 343-4379 or commercial 301-619-4379.

1-3. MAINTENANCE DIRECTORATE PERSONNEL

a. The Maintenance Engineering and Operations Directorate (MEOD) is part of USAMMA located at Fort Detrick, MD. The MEOD serves as an AMEDD focal point for multiple aspects of medical materiel maintenance. The MEOD is made up of the AMEDD National Maintenance Point (NMP), Maintenance Publications, and Maintenance Operations to include Depot Operations at Tobyhanna, PA, Hill AFB, UT, and Tracy, CA.

b. The DSN prefix is 343 and commercial phone numbers are 301-619-XXXX.

Director, Maintenance Engineering and Operations Directorate (4407):

<u>Position / Title</u>	<u>Area of Emphasis</u>
Administrative Assistant (4406) Directorate Sergeant Major (4464)	Administrative support ISO 9000 facilitator
Chief, Maintenance Operations (4365): Equipment Specialist (4368)	Division work-order reconciliation, reimbursements
Equipment Specialist (4378)	Customer service coordinator, Division project manager
Chief, Maintenance Operations Div: Hill AFB, UT DSN 586-4947 Commercial 801-586-4947	Primary focus on TOE medical equipment
Chief, Support Div: Hill AFB, UT DSN 586-4949 Commercial 801-586-4949	Repair parts support for TOE

Chief, Maintenance Operations Div: Tobyhanna, PA DSN 795-7744 Commercial 570-895-7744	Primary focus on TDA medical equipment
Chief, Maintenance Operations Div: Tracy, CA DSN 462-4556 Commercial 209-832-4556	Primary focus on x ray and TMDE
Chief, Maintenance Publications (4366): Visual Information Specialist (4370)	Maintenance website, TMs, electronic Publications, supply bulletins
Visual Information Specialist (4379)	TMs, electronic publications, supply bulletins
Chief, AMEDD National Maintenance Point (4382): Equipment Specialist (4376)	X-ray specialist, CT specialist, SF 380
Equipment Specialist (4377)	TOE unit fieldings, project management AMEDD TMDE coordinator
Technical Information Specialist (4374)	MARC data repository
Maintenance Staff Officer (4375)	Vacant
Maintenance Staff Officer (4373)	TOE equipment, APS support planning
Maintenance Staff NCO (4369)	Medical Equipment Tool Kits, ULLS-G/SAMS
Contractor (4381)	Sample data collection

1-4. MAINTENANCE DIVISIONS' ADDRESSES

- a. MEOD – UT
(1) Operations Division mail address

U.S. Army Medical Materiel Agency
Medical Maintenance Operations Division
ATTN: MCMR-MMM-DU
6149 Wardleigh Road
Building 1160
Hill Air Force Base, UT 84056-5848

(2) Operations Division freight address

U.S. Army Medical Materiel Agency
6149 Wardleigh Road
Building 1160, Bay 1
Hill Air Force Base, UT 84056-5848

(3) Support Division mail address

U.S. Army Medical Materiel Agency
Medical Maintenance Support Division
ATTN: MCMR-MMM-SU
6149 Wardleigh Road
Building 1160
Hill Air Force Base, UT 84056-5848

(4) Support Division freight address

U.S. Army Medical Materiel Agency
6149 Wardleigh Road
Building 1160, Bay 1
Hill Air Force Base, UT 84056-5848

b. MEOD – PA

(1) Mail address

U.S. Army Medical Materiel Agency
Medical Maintenance Operations Division
ATTN: MCMR-MMM-DP
Tobyhanna Army Depot
11 Hap Arnold Boulevard
Tobyhanna, PA 18466-5063

(2) Freight address

U.S. Army Medical Materiel Agency
Medical Maintenance Operations Division
Warehouse 4, Bay 1
Tobyhanna Army Depot
Tobyhanna, PA 18466-5063

c. MEOD – CA

(1) Mail address

U.S. Army Medical Materiel Agency
Medical Maintenance Operations Division
ATTN: MCMR-MMM-DC
Building T-255, Tracy Site
Defense Distribution Center
P.O. Box 960001
Stockton, CA 95296-0970

(2) Freight address

U.S. Army Medical Materiel Agency
Medical Maintenance Operations Division
Building T-255, Tracy Site
25600 Chrisman Road
Defense Distribution Center
Tracy, CA 95376-5050

1-5. RESERVE UNIT SUPPORT

a. U.S. Army Reserve units requiring maintenance support for medical equipment should contact their supporting RTS-MED which has been identified by the U.S. Army Reserve Command. If you do not know which site has been designated for your support, contact the Health Services Maintenance Technician, U.S. Army Reserve Command, at DSN 367-8217 or commercial 800-359-8483, option 1, then extension 8217. You may also contact one of the three RTS-MEDs below:

RTS-MED Fort Gordon, GA
DSN 780-7999
Commercial 706-791-7999

RTS-MED Fort McCoy, WI
DSN 280-2544
Commercial 608-388-2544

RTS-MED Camp Parks, CA
DSN None
Commercial 925-551-7130

b. If you have any questions or comments, please contact USAMMA at DSN 343-4382 or commercial 301-619-4382.

**1-6. USAMMA'S MAINTENANCE ENGINEERING AND OPERATIONS
DIRECTORATE ON-LINE**

a. The USAMMA's MEOD has a website to make finding that critical piece of maintenance information a little easier. We provide detailed information about our Medical Maintenance Divisions; test, measurement, and diagnostic equipment (TMDE); equipment support; imaging equipment; maintenance publications (to include on-line access to the maintenance supply bulletins); and training opportunities. We've also provided government and manufacturer links that we've found to be helpful. Included in our site is a search capability that allows you to quickly locate information on a specific subject.

b. Our website is located at <http://www.usamma.army.mil/maintenance>. If you have questions about the information we've provided or recommendations for enhancements to our site, send an e-mail message using the link on our home page.

CHAPTER 2. MEDICAL MAINTENANCE OPERATIONS INFORMATION

2-1. ELECTROSURGERY ANALYZER RF-302

When it is necessary to replace a fuse in the RF-302, it is imperative that the operator ensures the fuse is rated at .375A or 3/8A and will ohm out at 3 ohms or less. We have found 3/8A fuses in our inventory (NSN 5920-00-240-7957) with up to 10 ohms of resistance across them (approximately 37% of our inventory fall into this range). A higher resistance fuse will cause the RF-302 to be outside of the tolerances set up in the calibration procedure. This will adversely affect the lower end of the output power scale and negate any calibration the unit has undergone.

**2-2. IMPACT MODEL 326/326M SUCTION APPARATUS,
NSN 6515-01-435-0050**

When performing the operational verification on the Impact model 326M suction units following the procedures in the OEM maintenance manual page 11-2, it was found the units would not pass the ground resistance test. Impact was contacted about this problem. This is the response from the Service Department Manager.

GROUNDING RESISTANCE TEST OF MODEL 326/326M ASPIRATOR

Page 11-2 of the Manual for the Model 326/326M Aspirator indicates that a Grounding resistance test should be performed for the unit on exposed (unpainted and not anodized) metal surfaces. This test should not, in fact be performed and will be eliminated from the next revision of the manual.

All surfaces of the Model 326 are plastic, anodized or painted (i.e., the unit is internally painted with a zinc paint). Where there are conductive metal components (screws, connectors), these components are attached to plastic (i.e., not metal) surfaces or to anodized surfaces or to surfaces painted with a nickel-based paint.

The Model 326 Aspirator unit receives 12V from the ac power supply. Safety agencies define 12V as "low voltage." Some safety specifications set the cutoff, below which a system is considered a low voltage system, as high as 50V. I have never seen a specification that sets the cutoff at a voltage lower than 20V. 12V is well below even the most conservative limit. Units that are powered with low voltage dc are not normally considered to require voltage safety testing.

NFPA 99: Testing requirements for Portable equipment (Sections 7-5.1.2 & 7-5.1.3.2 -1999 Edition) specify voltage cutoff and exceptions to the ground resistance testing. The voltage cutoff and exceptions both apply to the Model 326M.

2-3. LITERATURE CORRECTIONS

The following paragraphs address errors, and corresponding corrections, found in the manufacturer's literature for several pieces of medical equipment. You are advised to correct your copies of the affected literature. The Original Equipment Manufacturer (OEM) has verified all recommended changes or corrections.

a. Propac 106, NSN 6515-01-423-5872/6515-01-423-5796

"NO C-LOCK" Message: Welch Allyn Protocol Technical Support provided the following information concerning functional verification SP02 tests, steps 14 thru 19.

Situation: Under SP02, the unit does sync with the ECG but when ECG cord is pulled out there is no "NO C-LOCK" error that flashes with the time and date using either the SP02/ECG simulator or hooking yourself up to the unit as the service literature states, although there is an ECG lead fail.

Reply by Welch Allyn: This test is written incorrectly. Research through our software builds show that at no time has our software ever displayed a "NO C-LOCK" message. The only indication of ECG and SP02 synchronization is shown in the SP02 waveform window as SYNC. The test should be to check that SYNC is indicated in the SP02 window when synchronized ECG and SP02 signals are present and that the SYNC indication goes away when the ECG connector is removed.

b. Propac 206: NSN 6515-01-432-2707/6515-01-432-2711

SYNC test LP5 – LP6s: Section 2 Functional Verification page 30 of the Propac 206 manual states:

36. Using either a Lifepak 5 or Lifepak 6s and appropriate Protocol adapter, set up the monitor and defibrillator according to instructions provided in the Defib Sync User's Guide.

37. Check the monitor display for sync marker on the ECG waveform.

38. Disconnect the defibrillator.

This test is done only using a LP5 or LP6s and will not work with any other Defibrillators. The LP5 and LP6s are no longer supported. The adapter cable is no longer available. Therefore these 3 steps are obsolete and no longer required.

c. Impact 754M Ventilator, NSN 6530-01-464-0267

(1) As per Impact, after performing repairs or the computer calibration on the 754M Ventilator you must ensure the copper tape in the battery compartment is intact and adhering to the case. During calibration you must peel back the tape to access the two-pin jumper on the CPU to connect the push button switch. After removing the switch you will need a piece of copper tape big enough to overlap the opening of the switch. Also if the case has been opened, ensure that the tape is stuck completely to both top and bottom. The copper tape continues the EMI shielding that makes the item certifiable for aircraft use.

(2) Step 6.2.4 of the test procedure has you measure the battery charging current but does not give the acceptable range. The acceptable battery charging current range is 5 – 200 mA.

(3) An 8-hour BURN IN is required after performing a hardware or computer calibration prior to performing the Test Procedure. Use the following settings when performing the burn-in.

Mode = A/C
 Rate = 15 BPM
 I time = 1.5 sec
 Vt = 750 ml
 FI02 = 21%
 External Air = OFF

(4) The current version of software provided by Impact for calibration of the 754M ventilator is not compatible with operating systems above Windows 98. If you use the calibration software on a newer operating system (Windows 2000, NT, XP) you will get a DCB error, cannot set port. Impact is currently working on a software upgrade to solve this problem.

d. Narkomed M Anesthesia, NSN 6515-01-457-1840

The USAMMA Maintenance Division in Utah has discovered a problem with the Narkomed M Anesthesia machines manufactured by North American Drager Medical, Inc.

(1) The machines are designed to have a safety backup system for incoming oxygen. This ensures that if the main supply is insufficient or depleted, the pressure differential check valve will select a small backup cylinder attached to the back of the Anesthesia machine. When connected to an "H" cylinder, the external regulator must be able to deliver 50 psig with a flow of four liters demanded from the machine. Most of the units already issued to the Army have external regulators that do not meet the pressure requirements. These regulators do pass the static pressure testing, but when flow is introduced, the pressure drops below the pressure differential threshold of 47 psig. The safety backup system is initiated, causing the backup cylinder to deplete even though the pipeline is still pressurized.

(2) Once the backup supply has been depleted, the system will revert back to the main supply. This problem causes there to be NO BACKUP OXYGEN SUPPLY during normal use. Anesthesiologists must ensure the primary supply is sufficient to provide oxygen to the patient during the entire procedure. The regulator in question is the only regulator authorized for use by the manufacturer for the Narkomed M, and it is only necessary for use when using bottled oxygen. This regulator is not necessary when using piped gas that is already regulated.

e. Bear 33 Ventilator, NSN 6530-01-324-4516

(1) 10v Power Supply: Table 5-4 has an error. This data is used to perform the power supply verification step 1.d in section 5 in the maintenance manual. The minimum and maximum voltages for the +10 VDC on the controller board were stated incorrectly.

Table 5-4
Power Supply Voltages Test Point

BUS	PCB	51000-8069	51000-08226	Minimum	Maximum
+5VDC	Controller	C9+	C5+	4.75 v	5.25v
+5VDC SW	Controller	C3+	C2+	4.75v	5.25v
+BUS SW	Controller	C2+	C1+	4.75v	23.0v
+10 VDC	Controller	C1+	C3+	6.80v	7.50v
+7.15 VDC	Monitor	TP2	TP2	6.80v	7.50v

(2) The error in Table 5-4 was confirmed by Bear Medical technical support. The correct values are listed in Table 5-4, below.

Table 5-4
Power Supply Voltages Test Point

BUS	PCB	51000-8069	51000-08226	Minimum	Maximum
+5VDC	Controller	C9+	C5+	4.75v	5.25v
+5VDC SW	Controller	C3+	C2+	4.75v	5.25v
+BUS SW	Controller	C2+	C1+	19.0v	23.0v
+10 VDC	Controller	C1+	C3+	9.50v	10.50v
+7.15 VDC	Monitor	TP2	TP2	6.80v	7.50v

(3) Low Exhal Vol Alarm: The Operational Verification Check List located at the back of section 3 of the Maintenance Manual lists a step to check the operation of the LOW EXH. VOL Alarm. This step is not shown in the verification procedure and does not exist as per Bear Technical Support and can be omitted.

2-4. REPAIR AND RETURN MAINTENANCE SUPPORT FOR NATIONAL GUARD UNITS

a. The USAMMA Medical Maintenance Divisions in California, Pennsylvania, and Utah will provide on-site and repair and return maintenance support for all National Guard field TO&E medical equipment within their regions.

b. The regions under California Maintenance Division consist of the following states: Arizona, Arkansas, California, Hawaii, Louisiana, Mississippi, New Mexico, Nevada, Oklahoma, Oregon, Texas and Washington. The telephone number is DSN 462-4556/4560 or commercial 209-839-4556/4560.

c. The regions under Pennsylvania Maintenance Division consist of the following: Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, Tennessee,

Vermont, Virginia, and West Virginia. The telephone number is DSN 795-7744 or commercial 570-895-7744.

d. The regions under Utah Maintenance Division consists of the following states: Alaska, Colorado, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, Wisconsin, and Wyoming. The telephone number is DSN 586-4947/4948 or commercial 801-586-4947/4948.

e. All the National Guard units within each region may request on-site sustainment maintenance support or repair and return service by contacting the appropriate Maintenance Division listed above. Requests should include the city, address, DODAAC, point of contact with telephone number and e-mail address, and a detailed listing of medical equipment at each location.

2-5. SINK UNIT, SURGICAL SCRUB, FIELD, NSN 6530-01-429-6715

a. Instructions for unfolding and setting up the frame for the surgical scrub sink were developed. The steps, which include a graphic explanation, are shown at Appendix E.

b. For questions concerning the sink unit, please contact the MMOD-PA at DSN 795-6668 or commercial 570-895-6668.

APPENDIX A: CD 1 TABLE OF CONTENTS

**Operator & Maintenance
Literature for Medical Equipment**
Disc 1

10/20 Standards, Maintenance Allocation Chart, and Equipment List for Reportable Medical Equipment

6230-01-481-2214 Floodlight Emergency, Med-Tent-LT
Operator Guide and Parts List

*6515-00-137-6511 Electrosurgical Apparatus Portable, LM-90
Service Manual
User Manual

6515-01-279-6450 Monitor Oxygen Battery Power, 5120
Operation and Maintenance Manual
Service Manual

6515-01-309-6647 Electrosurgical Apparatus Portable, Force 2
Service Manual
TM 8-6515-003-24&P

6515-01-327-6798 Concentrator Oxygen, AS 005-1
Patient Manual

6515-01-429-1381 Defibrillator/Monitor-Recorder, Lifepak 10
6515-01-453-4003
Operating Instructions
Service Manual

6515-01-434-4629 Concentrator Oxygen, AS 005-4
Service Manual

6530-01-321-5592 Table Operating Field (FST)
Assembly and Packing Instructions

6530-01-325-9299 Ventilator Volume Portable, Bear 33
Maintenance Manual
Clinical Instruction Manual

(continued) APPENDIX A: CD 1 TABLE OF CONTENTS

6630-01-411-2568 Analyzer, Clinical Chemistry, I-Stat 111000
 System Manual

6630-01-415-1593 Analyzer Blood, Piccolo
 Operator's Manual

*6640-01-257-1944 Centrifuge Laboratory,
 Microhematocrit, Compur 1100
6640-01-068-9612
 Operating Manual and Servicing Instructions

6640-01-326-1590 Rotator Laboratory, 14-251-200
 Instructions

6640-01-431-5696 Rotator Laboratory, 1314
 Operation Manual

* For parts support call Medical Maintenance Support Division, Utah (commercial 801-586-4949/4950 or DSN 586-4949/4950, fax X5058).

APPENDIX B: CD 2 TABLE OF CONTENTS

**Operator & Maintenance
Literature for Medical Equipment**
Disc 2

4110-01-451-2356 <u>Maintenance Manual</u>	Refrigerator Solid State Biological, M-30TR
6515-00-137-6511 Service Manual	Electrosurgical Apparatus, Portable, SSE2L
6515-01-355-6479 <u>Operation and Maintenance Manual</u>	Vaporizer Anesthesia Drawover, 1101-9001-000
6515-01-378-4176 Operator's Manual Service Manual	Craniotome Power System, MD030
6515-01-414-3607 Service Manual Operation and Maintenance Manual	Cryosurgical System, CE-2000
6515-01-423-5796 6515-01-423-5872 <u>User's Guide</u> <u>Calibration/Maintenance Manual</u> <u>Schematics and Drawings Set</u>	Monitor Patient Vital Signs, 106EL w/spo2 Monitor Patient Vital Signs, 106EL
6515-01-432-2707 6515-01-432-2711 <u>Directions for Use</u> <u>Reference Guide</u> <u>Update</u>	Monitor Patient Vital Signs, 206EL w/spo2 Monitor Patient Vital Signs, 206EL w/spo2 and capnography
6515-01-434-1999 Level 1) <u>Owners Manual</u>	Blood/Fluid Warmer & Infusion, System 1000 (Sims
6515-01-435-5350 <u>Instruction Manual, Operation and Service</u>	Suction Apparatus Oropharyngeal, 325M

6515-01-464-0267	Ventilator Volume Portable, 754M Eagle
Operation and Service Manual	
6520-00-181-7349	Dental Chair and Stool Unit, CM-185
Installation and Repair Manual	
TM 8-6520-004-14&P	
6520-01-456-7170	Dental Unit, Self-Contained, ADU-10CF
Operation and Maintenance Manual	
Service Manual and Parts List	
	Portable Air Compressor, AA-75CF
Operation and Maintenance Manual	
Service Manual and Parts List	
6525-01-325-3740	X-ray Apparatus, Portable, 1200
6525-01-457-1536	
<u>Operation and Maintenance Manual</u>	
6525-01-345-6089	Processing Machine Radiographic, Curix 60
Operator's Installation and Instruction Manual	
*6530-01-429-6715	Sink Unit Surgical Scrub, RPC 1000
<u>Operator's, Organizational, Maintenance Manual</u>	
6540-00-181-8037	Lens Measuring Instrument Ophthalmic, 4001
<u>Instruction Handbook</u>	
6540-01-032-4518	Light Slit Ophthalmic, Marco V
<u>Instruction Manual</u>	
*6540-01-145-8775	Chair Optometry, Portable
<u>Technical Manual</u>	
6540-01-241-6965	Slit Lamp, SL-6E
Service Parts List	
TM 8-6540-002-14&P	
6545-01-302-0228	Sink Unit, Surgical Scrub, Field
<u>TM 8-6545-001-24&P</u>	

(continued) APPENDIX B: CD 2 TABLE OF CONTENTS

6640-01-258-0006 Shaking Machine Laboratory, Vortex Genie 2
Operating and Installation Guides

6640-01-316-5084 Centrifuge, 708T
Operation and Service Manual

6650-01-293-7240 Microscope Optical, Labophot
6650-01-325-3747 Microscope Optical, Labophot2
Operation and Preventive Maintenance

6650-01-406-1828 Microscope Optical, BX40F3
Instructions

*For parts support call Medical Maintenance Support Division, Utah (commercial
801-586-4949/4950 or DSN 586-4949/4950, fax X5058).

APPENDIX C: CD 3 TABLE OF CONTENTS

**Operator & Maintenance
Literature for Medical Equipment**
Disc 3

4110-01-117-3902 Refrigerator, Mechanical, Blood Bank, BBR37SS-1B-03
TM 8-4110-001-24&P
Commercial Operating Instruction Manual

4110-01-249-4476 Refrigerator, Mechanical, Blood Bank, CT1-1B-06
Commercial Operating Instruction Manual
Commercial Maintenance Manual

4110-01-287-7111 Solid State Refrigerator, DLA-50T
TM 8-4110-002-14&P
Operational Manual
Maintenance Manual

*4110-01-287-7111 Thermostabilizer for Blood, RCB42 P
Service Manual

6515-01-174-1477 Suction and Pressure Apparatus, 317M
Instruction Manual, Operation and Service

6515-01-185-8446 Anesthesia Apparatus, 885A
Instruction and Service Manual with Illustrated Parts List
TM 8-6515-001-24&P

6515-01-242-9123 Suction Apparatus, 308M
6515-01-304-6497
TM 8-6515-004-24&P
Instruction Manual, Operation and Service

6515-01-267-2726 Suction Apparatus, 306
6515-01-267-2727
TM 8-6515-013-14&P, 306M
Instruction Manual, Operation & Service, 306 Series

*6515-01-291-1198 Defibrillator/Monitor-Recorder, 43110MC, Operating Guide
Defibrillator Module, 43130M, Service Manual

*6515-01-291-1199 Monitor-Recorder Module, 43200M/MC/MD, Service Manual

(continued) APPENDIX C: CD 3 TABLE OF CONTENTS

6515-01-313-6242 Digital Thermometer, 600
Directions for Use Manual
Technical Manual
TM 8-6515-012-14&P

6515-01-383-0922 Anesthesia Ventilator, 7000
Service Manual
Operation and Maintenance Manual

6515-01-452-0625 Infusion Pump, MedSystem III
Service Bulletins
MedSystem III Directions for Use
Technical Service Manual MedSystem III Infusion System

6520-00-000-0158 Dental Light Set, LF II
TM 8-6520-001-24&P
Installation Instructions, Operating Instructions, Use and Care Manual
Service Manual, Repair Manual, and Parts List Manual

6520-00-139-1246 Dental Compressor-Dehydrator, M5B
TM 8-6520-003-24&P
Technical Manual

6520-00-139-1246 Dental Compressor-Dehydrator, PAC 6.7
6520-01-398-4613
Technical Manual, Defiance Electronics
Owners Manual/Parts List, HP Series, Piston Air Products
HP Series, 1 & 1-1/2 Horsepower, Pneumotive Service Procedures

6520-00-140-7663 Dental Operating Unit, Porta-Cart 3406
6520-01-272-4531
Operation and Maintenance Instructions
TM 8-6520-002-24&P

6520-00-966-3729 Electric Laboratory Dental Furnace
Instructions for the Operation and Maintenance

6520-01-333-5961 Dental System, FUS336
Operation and Maintenance Instructions

6520-01-343-8126 Portable Field Dental Unit, 2100M
Operation and Maintenance Manual

(continued) APPENDIX C: CD 3 TABLE OF CONTENTS

6520-01-446-3783	Portable Dental Chair, ADC-01CS <u>Operation and Maintenance Manual</u>
<u>6525-01-303-6235</u>	<u>X-ray Processor, AFP 14X-3</u>
<u>6525-01-370-7552</u>	<u>Portable Dental X-ray System, ALPHA MPDX</u> Operation Manual Maintenance Manual
<u>6525-01-422-6122</u>	<u>Processing Machine, Radiographic Film with Daylight Loader</u> Installation, Operation, Service, and Parts Manual
*6530-00-926-2151	Portable Sterilizer System, M-138 <u>Instructions</u> <u>TM 8-6530-004-24&P</u>
<u>6530-01-244-0708</u>	<u>Field Hospital Surgical Light, 2420</u> Service Manual
6530-01-246-1906	Portable Intermittent Traction Machine, Tru-Trac TT-92B Series <u>Operating Instructions</u> <u>Service Manual</u>
6530-01-306-1771	Validator, 8" and 10" <u>Operator's Manual</u> <u>Service Manual</u> <u>Parts List, 8"</u>
<u>6530-01-308-7740</u>	<u>Sink Unit, 950S936</u> <u>Hamilton Installation Operation and Maintenance Manual</u>
6530-01-327-0686	Portable Ventilator, 750 and 750M <u>TM 8-6530-009-24&P</u> <u>Instruction Manual, Operation & Service</u>
<u>6530-01-374-8903</u>	<u>Portable Ventilator, Bird Avian</u> Operator/Service Manual

(continued) APPENDIX C: CD 3 TABLE OF CONTENTS

6530-01-442-8720 Steam Sterilizer, MC 8 and MC 10
Service Manual GLS-8 and GLS-10

6630-01-284-6546 Analog pH Meter, Orion Model 301
Commercial Maintenance and Operation Manual

6630-01-300-8711 Analyzer, Sodium Potassium, 614
Instruction Manual
Service Manual

6630-01-316-5085 Centrifugal Analyzer, QBC II
Maintenance Manual for the QBC II Reader, Model 4477
Operator's Manual For The QBC II Plus Centrifugal Hematology System and
Maintenance Manual For The QBC Centrifuge, Model 4207

6630-01-364-8555 Portable Blood Gas Analyzer, GEM-STAT
Comprehensive Service Manual
Operator's Manual

6640-01-034-0479 Colony Counter, 3325, 3326, 3327, 3328
Instruction Manual

6640-01-143-2055 SERO-FUGE and SERO-FUGE II Laboratory Centrifuge,
0521, 0522, 0541
TM 8-6640-001-24&P
Operator's Manual

6640-01-283-9308 Viewer Agglutination
6640-01-302-1025 Oven, STG80
Operation/Instruction/Maintenance Manual

6640-01-315-5382 Laboratory Centrifuge, Z 320
Instruction Manual
Service Manual

6650-00-973-6945 StereoZoom Series Microscope
Instruction Manual

APPENDIX C: CD 3 TABLE OF CONTENTS

6650-01-259-3008 Field Microscope, FM 600
Maintenance Manual
Instruction Manual

*For parts support call Medical Maintenance Support Division, Utah (commercial 801-586-4949/4950 or DSN 586-4949/4950, fax X5058).

APPENDIX D: CD 4 TABLE OF CONTENTS

**Operator & Maintenance
Literature for Medical Equipment**
Disc 4

- 4110-01-291-7046 Mechanical Field Ward Refrigerator
 Operation and Maintenance Manual
- 4110-01-320-1699 Redundant Refrigeration System, MBF-500
 Service Data Manual
- 4110-01-358-3836 Refrigerator-Mechanical, Biological, ERB-5-0378
 Operation and Maintenance Manual
- 4110-01-450-0060 Blood Plasma Freezer, CTF1-1B-06
 Service Manual
 Electronic Temperature Recorder Manual
 Monitor DTPM Series Installation and Operating Instructions
 Transformer & Recording Thermometer Installation, Operation and
 Service Manual
- 6515-01-150-7840 Blood/Fluid Warmer, FLOTEM IIe
 Operation Instruction Manual
 Technical Maintenance Manual
- 6515-01-241-7531 Suction Apparatus (Uni-Suction Pump)
 Description and Function
 Service Manual
- 6515-01-261-0484 Aspirator, RS-4, RS-6 & RS-5X
 Operators Manual
- 6515-01-293-5578 Doppler Ultrasound Instrument, D8
 Operator, Instruction and Service Manual
- 6515-01-318-1558 Arthroscopic Surgical Unit, MIL-D-42048
 Maintenance Instructions
- 6515-01-376-6564 Upper GI Fiberscopes, FG-24X, FG-27X, FG-29X,
 FG-32X, FG-34X
 Owner's Manual

6515-01-379-7852 Cutter-Vacuum, Orthopedic Cast, 940
Maintenance/Operator's Manual

6515-01-386-4354 Transcutaneous Electrical Nerve Stimulator, Maxima II
Operation Manual

6525-01-312-6411 Continental X-ray, CS-8952
Operator's Manual 9023-401
Volume I
Volume II
Shipping Retrofit Instructions, Manual 9023-407

6525-01-369-7178 Portable Darkroom X-ray, PDR-1
Technical Manual
Operating Instructions and Service Manual

6525-01-384-9296 X-ray Apparatus, Clinix VP4
System Operator's Guide
System Installation Manual, Table/SynerGen
Service Manual, X-ray Generator
Installation Manual, Collimator
Installation Manual, Table
Parts List for Clinix VP4
Schematics 1 for Clinix VP4
Schematics 2 for Clinix VP4

6525-01-425-5216 Dental X-ray Apparatus, HDX
Installation, Operation & Maintenance Manual

6525-01-468-1672 Portable Dental X-ray Unit, MinXray P200D Mark III
Installation and Operating Instructions

6525-01-480-2199 Medical Filmless Imaging System, (8 models)

6530-01-127-2215 Whirlpool Bath, 290
6530-01-206-6016
Maintenance Manual and Operating Instruction Manual

(continued) APPENDIX D: CD 4 TABLE OF CONTENTS

<u>6530-01-128-2442</u>	<u>Whirlpool Bath</u> Mobile Hydrotherapy Unit -- Operation, Service and Repair Parts Manual Electric Turbine Ejector – Operation, Service and Repair Parts Manual Electrical Converter – Operation and Maintenance Manual
<u>6530-01-244-1976</u> <u>6530-01-207-0827</u>	<u>Solution Warming Cabinet – Two Compartment, 7924-SSDP</u> Operator's Manual Maintenance Manual
<u>6530-01-244-8101</u>	<u>Medi-Therm Hyper/Hypothermia, MTA-4700/ MTA-4701/MTA-4702</u> Service Manual Operating Instruction Manual
<u>6530-01-254-4135</u>	<u>Mobile Ultrasonic Cleaner, MSC-900T-11/21</u> Operating Instruction Manual Maintenance Manual
6530-01-306-9510	Sterilizer, Surgical Instrument and Dressing <u>Operator's Organizational Maintenance Manual</u>
<u>6530-01-353-9883</u>	<u>Surgical Tables</u> Maintenance Manual, 2080M and 2080M I.A. Equipment Manual, 2080IA
Water Distribution and Waste Water Management System (WDWWMS) <u>Operator's and Organizational Maintenance Manual</u>	
6545-01-435-6914	Water Distribution Set, Hospital, DEPMEDS
6545-01-434-9624	Wastewater Management Set, Hospital, DEPMEDS
6545-01-435-6013	Waste-Water Augmentation Set, Hospital, DEPMEDS
6545-01-480-6913	WDWWMS Maintenance Set, Hospital, DEPMEDS
6545-01-491-4732	Water Distribution Set, Hospital, MRI 84 Bed
6545-01-491-4728	Wastewater Management Set, Hospital, MRI 84 Bed
6545-01-491-4698	WDWWMS Maintenance Set, MRI 84 Bed
6630-01-344-9996	Plasma Coagulation Timing Instrument, Electra 750 <u>Service Manual</u>

6630-01-376-9823 Chemical Clinical Analyzer
Service Publication for the DT60 Analyzer and DTE Module
Service Publication for the DTSC Module

6640-00-765-0621 Water Bath, Imperial III
Instruction Manual

6640-01-249-1212 Pipette Shaker, 0621010
Technical Manual

6640-01-291-8390 Hot Plate/Stirrer, 502 Series
Operating and Maintenance Manual

6640-01-308-7749 Refrigerated Centrifuge, 3497
Instruction Manual

APPENDIX E: SINK UNIT FRAME ASSEMBLY

Sink Unit Surgical Scrub

Change overall arrangement of upper and lower frame



Figure 1
Unpacking / Assembly

To prepare the Portable Scrub Sink for use, follow these steps:

Remove hoses, brush pockets, convenience tray, control box, frame assembly, support rods, and faucet from the shipping container. Unfold the frame so that the longer legs are on the ground and the shorter legs are above the longer legs as in Figure 1, above.

Sink Unit Surgical Scrub
Change overall arrangement of upper and lower frame



Figure 2

Unfold the frame so the longer legs are in the up position as shown in Figure 2, above, and the shorter legs are on the ground.

APPENDIX E: SINK UNIT FRAME ASSEMBLY

Sink Unit Surgical Scrub
Change overall arrangement of upper and lower frame



Figure 3

When the Portable Scrub Sink is assembled it should look like Figure 3, above.




CUMULATIVE INDEX FOR 2003 DA SB 8-75-S2

	<u>SB 8-75-</u>	<u>Page</u>
Biomedical Equipment Technician (BMET) Training Website	S2	1-1
Electrosurgery Analyzer RF-302	S2	2-1
Equipment Literature Availability	S2	1-1
Impact Model 326/326M Suction Apparatus, NSN 6515-01-435-0050	S2	2-1
Literature Corrections	S2	2-1
Maintenance Directorate Personnel	S2	1-1
Maintenance Divisions' Addresses	S2	1-2
Repair and Return Maintenance Support for National Guard Units	S2	2-4
Reserve Unit Support	S2	1-3
Sink Unit, Surgical Scrub, Field, NSN 6530-01-429-6715	S2	2-4
USAMMA's Maintenance Engineering and Operations Directorate On-line	S-2	1-4

SB 8-75-S2

By Order of the Secretary of the Army:
ERIC K. SHINSEKI
General, United States Army
Chief of Staff

Official:


JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army

Distribution:

To be distributed in accordance with initial distribution number (IDN) 340016, requirements for SB 8-75 Series.